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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,417	02/14/2005	Hiromitsu Takeda	050034	4544
23850 7590 03/04/2009 KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 WASHINGTON, DC 20005				
EXAMINER				
JOY, DAVID J				
ART UNIT		PAPER NUMBER		
1794				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/524,417

Applicant(s)

TAKEDA ET AL.

Examiner

David J. Joy

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-6 and 8 are pending as amended on November 21, 2008, with Claim 7 having been cancelled.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

3. Applicant's amendments to the claims and the corresponding cancellation of Claim 7, in the amendment filed on November 21, 2008, obviates the previously cited rejections under 35 U.S.C. §§ 102 and 103.
 - a. The rejection of Claims 1-4 and 6 under 35 U.S.C. §102(e), as being anticipated by the U.S. Patent of Strickler et al. (6,858,306; hereinafter "Strickler"), as evidenced by the U.S. Patent of Oliver et al. (4,797,317; hereinafter "Oliver"), has been withdrawn.
 - b. The rejection of Claims 5, 7 and 8 under 35 U.S.C. §103(a), as being unpatentable over Strickler in view of Oliver, has been withdrawn.

- c. The rejection of Claims 4, 5 and 7 under 35 U.S.C. §103(a), as being unpatentable over Strickler either as evidenced by or taken in view of Oliver, as applied to the rejections of Claim 1-5 above, and further in view of the Japanese Patent Publication of Toshiharu et al. (JP 10-182190; hereinafter “Toshiharu”), has been withdrawn.
- d. The rejection of Claim 7 under 35 U.S.C. §103(a), as being unpatentable over Strickler either as evidenced by or taken in view of Oliver, as applied to the rejections of Claim 1-5 above, and further in view of the Japanese Patent Publication of Masaaki et al. (JP 2000-238170; hereinafter “Masaaki”), has been withdrawn.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 1-6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The addition of the word “type” extends the scope of the claims so as to render them indefinite since it is unclear as to what exactly

“type” is intended to convey. The addition of the word “type” to the otherwise definite expression renders the definite expression indefinite by extending its scope. *Ex parte Copenhaver*, 109 USPQ 118 (Bd. App. 1955).

6. Claims 3, 6 and 8 are rejected accordingly, as they all depend upon Claim 1.

Claim Rejections - 35 USC § 103

7. Claims 1-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the U.S. Patent of Lin (5,275,869) in view of the U.S. Patent Applicant Publication of Inoue et al. (2002/0033117; hereinafter “Inoue”).

8. Lin teaches a laminate structure comprising a heat ray reflection type glass substrate, wherein the substrate has solar radiation reflecting properties and visible light reflectance of 10% or more, and a visible light absorbing film formed by an absorbent ink that is coated on the inner surface of the glass substrate (see Abstract; see also Column 1, Line 67 - Column 2, Line 4; see also Column 2, Lines 28-54). Specifically, Lin recites that the heat ray reflecting glass has a reflectance as high as 84%, but Lin goes further in providing that in practical use the reflecting rate is in the range of 12% to 50% (see Column 1, Line 67 - Column 2, Line 4). Lin also teaches an ink composition

that is a black or gray printing ink coating, but Lin fails to expressly provide any details as to the ink composition. Inoue, which is drawn to an ink composition, provides that it is known to have an ink composition that is dark colored, black, or dark gray in color, and that such an ink composition can comprise such pigments as carbon black (see Abstract; see also ¶ [0030]). Additionally, Inoue teaches that in order to deepen the color of ink composition, it is preferable that the pigment particles have an average particle diameter of 0.01 to 0.5 μm (which obviously converts to 10 to 500 nm) (see Abstract; see also ¶ [0031]). Inoue also teaches that the ink composition contains an organic high polymer as a binder (see ¶¶ [0038]-[0041]). Additionally, Inoue teaches that the ink composition will absorb light (see ¶ [0037]). While Inoue fails to specifically provide that the particles will absorb visible-region light and transmit near-infrared-region light and infrared-region light, the fact that the ink composition contains the same species of pigment particle as that which is claimed, it follows that the ink taught by Inoue will exhibit the same absorbent characteristics. As Lin and Inoue are drawn to analogous fields of invention, it would have been obvious to a person having ordinary skill in the art at the time of invention to have made the laminate structure taught by Lin, but to use an ink composition like the one taught by Inoue, thereby arriving at the presently-claimed invention.

9. Lin also teaches that the heat ray reflection type substrate is a glass sheet onto which a metallic thin film of either silver or aluminum has been formed, via vacuum deposition (see Column 3, Line 53 – Column 4, Line 2; see also Example 1 at Column 4, Line 47 - Column 5, Line 11). Additionally, Lin provides that the glass substrate, onto which the metallic thin film is formed, is then laminated to another glass substrate sheet (see Column 3, Line 53 – Column 4, Line 2). Further, Lin provides that the laminate structure is incorporated into a glass structure (i.e., a structural member) via an intermediate member (i.e., an intermediate adhesive layer incorporated into the laminated structure) (see Column 3, Line 53 – Column 4, Line 2).

10. It is noted that for the purpose of construing the claims, the recitation of the “laminate consisting essentially of” the claimed components has been treated as if it recited the “laminate comprising” the claimed components. While it is recognized that the phrase “consisting essentially of” narrows the scope of the claims to the specified materials and those which do not materially affect the basic and novel characteristics of the claimed invention, absent a clear indication of what the basic and novel characteristics are, “consisting essentially of” is construed as equivalent to “comprising”. Further, the burden is on the applicant to show that any additional

components in the prior art would in fact be excluded from the claims and that such ingredients would materially change the characteristics of the applicant's invention. See MPEP § 2111.03.

11. With respect to such claimed properties as the degree of visible light reflectance, the degree of reduction of solar radiation, the haze value as measured according to JIS K 1705, and the value of chromaticness in the $L^*a^*b^*$ color system, the Office realizes that all of the claimed effects or physical properties are not positively stated by the references. However, the combined references teach all of the claimed components, as well as the claimed structure for the laminate and the structural member. Therefore, the claimed effects and physical properties (i.e., the degree of visible light reflectance, the degree of reduction of solar radiation, the haze value as measured according to JIS K 1705, and the value of chromaticness in the $L^*a^*b^*$ color system) would implicitly be achieved by a composition with all of the claimed constituents. If it is the Applicant's position that this would not be the case: (1) evidence would need to be provided to support the Applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients/constituents.

Response to Arguments

12. Applicant's arguments with respect to Claims 1-8 have been considered but are moot in view of the new ground of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

14. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date

of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Joy whose telephone number is (571) 272-9056. The examiner can normally be reached on Monday - Friday, 7:00 AM - 3:30 PM EST.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie E. Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DJJ/
Examiner, Art Unit 1794
02/27/2009

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794